1: Warner E-5 (1926-1929) 1937
OI 17 Murngin OI 17

and as an integral part of the culture. Murngin myth dies hard, and ownership of land is in Murngin myth even after the final destruction of a particular clan. It would never occur to a victorious group to annex another's territory, even though the entire male population were destroyed and the dead men's women and children taken by the victors. In the passage of time the clan using it would absorb it into their own territory and the myth would unconsciously change to express this. In the thought of the Murngin, land and water, people and clan are an act of the creator totem and the mythological ancestors, who always announce in myth and ceremony that this is the country of such and such a clan; to expropriate this land as a conscious act would be impossible. Just as the totem, the creator, and the members are a permanent and inextricable part of the culture, so is the clan's ownership of the land. This will become clearer when the concepts of birth, death, and totem are associated, and the sacred wells of the clans considered.

The forty or fifty-odd people who belong to a clan do not all live in the land of the clan. All sisters and daughters, since the rule of marriage is patrilocal after the first year or two, go to their husband's clan to live and rear their families. This means that fully half of the members of the clan live after the age of puberty with a group belonging to the opposite moiety. On the other hand, the wives of the clansmen have come from clans of the opposite moiety and make up the difference in population caused by the loss of the group's own females.

Friendly clans always live together during the seasons when food is plentiful in certain area. When the turtles of Buckingham Bay are laying hundreds of eggs nightly along the Djirin coast, the Birkili and Wangurri may be found there. When the cycad palm nuts are ready for picking on Millingimbi Island, the surrounding clans gather for the period of plenty. This is done as a right, no invitation being necessary and no one questioning this right as long as peace reigns. Let there be trouble and cause for a possible killing, and the visitors return to their own land, even though their visit has taken on the nature of a permanent residence.

The most important unifying concept in the whole of clan ideology is that of the sacred water hole in which reposes the spiritual unity of clan life. It is the fundamental symbol of clan solidarity. From it come all the eternal qualities, and to it those qualities return when they have been lived or used by members of the clan. Water, in Murngin thought, is one of the most important symbols of spiritual life.

1: Warner E-5 (1926-1929)1937
OI 17 Murngin OI 17

CHAPTER V

PRIMARY ADAPTATIONS AND TECHNOLOGY

THE GENERAL PROBLEM

The economic life of a people is essentially concerned with relating the primary technological adaptation to nature and the community's secondary adaptation which is its social organization. Many peoples have developed a separate set of unified social mechanisms which are roughly called their economic systems, such as the organized market of modern capitalism or the simpler and less developed systems of agricultural barbarism. The tools and implements are formed into a general order of making and using to exact a supply of food and other creature necessities from nature, and they are then used by the population of a group in a systematized manner through a set of conventions and social usages which are dictated by the social organization. The social organization regulates the technology and helps discipline the distribution and consumption of its productivity.

The Murngin have not created a separate economic structure and are dependent on their other social institutions to regulate indirectly their technology and control the distribution and the consumption of goods and services.[1] The present chapter will be concerned with the purely economic aspects of the social structure, and with artifacts and their manufacture and use.

I. The Place of the Murngin Social Structure in Organizing Production of Creature Necessities

1. *The Horde*

The horde is an unstable economic group whose membership and size are regulated by the seasonal cycle. In the rainy months this group may be, and frequently is, only a kinship group composed of a few brothers and their wives and children or possibly "brothers-in-law" and their families. (These relatives are usually connected by blood.) When the dry season begins and the various food-producing areas are

[1] The economic horde organization is only partly an exception to this.

1: Warner E-5 (1926-1929) 1937
OI 17 Murngin OI 17

open to human occupation by the drying of the land, the burning of the spear grass, and the disappearance of the swarms of vicious insects, these smaller groups coalesce into larger units which may contain as many as thirty or forty people and will contain many more if a large ritual is being celebrated. Every member of this group is related closely to at least one or more other individuals in the group, but to the rest he is only tribally related. Where the sea-turtle eggs on the sand beaches are most plentiful, the oyster beds most prolific and accessible, sea-bird eggs most abundant, lily and yam swamps most productive, and the cycad palm nuts ripened and ready for picking, there will be found the horde groups.

All of the people in the horde will be of friendly clans which are usually closely intermarried; if there are antagonisms they are suppressed or given expression in a peace-making makarata, which allows those involved to remain in harmony. As soon as food is plentiful the better areas usually become locations for the great rituals which take place at this time; the ceremonial life definitely enlarges the size of the horde groups. The camp of the horde is organized spatially in the same way as the clan lands are spatially related to each other.

Ritual sanctions at this time help prevent open strife, which is always a possibility whenever the clans come together. The belief that the totem will be offended if clashes occur between opposing clansmen usually keeps the peace. Ritual sanction, then, is the most powerful force in regulating the peaceful behavior of these larger food-gathering hordes. If it were not for these extreme sanctions the larger hordes could not be formed. Peoples with a background of feud and warfare who might not otherwise risk meeting one another can be fairly certain of peace in a horde gathered for a ritual. Since the local clans which start the ceremony have it well under way and the totemic emblems have been made and are in the camp by the time the first guests arrive, hesitant visitors can feel comparatively safe in coming to the ceremony. The bitterly antagonistic clans, however, who have a continuous blood feud tradition and a record of killing back of them would never be present unless under extreme circumstances; for religious sanctions or peace-making duels would not prevent open strife and possible secret killings between them.

The horde, then, is governed by the seasonal fluctuation of plenty or scarcity, and its extreme in size is effected by the attractive stimuli of important ceremonies.

The usual division of labor obtains during the period of the larger

ARNHEM LAND: ART, MYTH AND SYMBOLISM

7. DECORATED IMPLEMENTS AND WEAPONS

*532 171 The aborigines of Australia gain much pleasure from the painting of their implements and weapons. The painted shields of Queensland[12] and the engraved boomerangs of northern New South Wales[13] are typical examples.

In Arnhem Land, where neither the shield nor the boomerang is used, it is the paddles and the spear-throwers which receive the attention of the artists. [517] Warner[14] records that among the aborigines of Milingimbi, 'although the paints dissolve immediately in water, the natives often paint their paddles for the mere pleasure of decorating them and seeing their beauty.' The natives of Groote Eylandt and Yirrkalla paint both their spear-throwers and their paddles. At the latter place the blades of many of the paddles are covered with engraved or painted designs of totemic significance.

(1) PADDLES FROM YIRRKALLA

The Spirit Men, Maranatuer and Bunjinkum

*773 776 Two brothers, *Maranatuer* and *Bunjinkum*, noted fishermen and hunters, once lived at Jumbara-pinja, a locality on the Pali-pali River which runs into Arnhem Bay.[15] One day the two *Mokoi* speared a particularly large *dua* turtle called *talibo* (possibly a logger-head),[16] which was so powerful that it towed them far out to sea before they were able to haul the turtle close enough to the canoe to kill it. This accomplished, they paddled back to their camp at Jumbara-pinja, disemboweled the creature and put it on the fire to cook.

Whilst they were waiting, *Maranatuer* looked toward the south and saw the [132 dry-season wind, *timaru*, coming toward them. They were just congratulating ● 221] each other about this, for the period of the *timaru* wind is the season of maturing fruits and underground tubers, when *Bunjinkum*, looking in the opposite direction, saw *Tjambuwal*, of the wet-season wind, *bara*, approaching. Not wishing to be caught between the two winds the brothers hastily ate the turtle, embarked in their canoe and paddled to Jarkala, an island midway between Elcho and the Wessels. Then, hearing that two other *Mokoi*, *Gunbiri* and *Kaiamburo*, friends of theirs, were living on an adjacent island, the brothers left Jarkala and went to stay with them. The four *Mokoi* still live on that island, although no aborigines have ever seen them.

*532 Plate 144C, D is the obverse and reverse sides of the paddle.

*773 776 The central vertical panel on Pl. 144C is the River Pali-pali, at Arnhem Bay, along which the brothers paddled their canoe when they were setting out to catch a turtle. The cross-hatched transverse bands on either side of the river indicate the rocks and sand-banks in its bed.

In the middle of Pl. 144D is the canoe and its occupants, *Maranatuer* being at the top and *Bunjinkum* at the bottom. The dark-coloured bands in panel *a*

12. McConnel (1935), pp. 40-48. 13. Davidson (1937), p. 23.
14. Warner (1937), p. 492. 15. Map, Fig. 57.
[136] 16. The logger-head turtle (*Caretta caretta*) is known to have reached the weight of two tons.

[Text continues on p. 450 452]

8: Berndt E-5 (1946-1950) 1954
OI17 Murngin OI17

with other adjacent groups. On the border line between western and eastern Arnhem Land there are tribes affiliated with the eastern people, but retaining their own distinct cultural pattern. Apart from the linguistic variations between the eastern and western groups, and the tribal organisation of the one and the clan-linguistic group set-up of the other, the principal difference lies in the eastern form of mainly patrilineal descent and the western pattern of descent through the mother.

The moiety is the most important feature in the social organisation of the Wulamba people of the east and south-east. It serves to classify under these two main headings all clans and linguistic groups, the known universe, and the whole life of the people, and affiliates all those belonging to the same moiety. The moieties are exogamous, and are thus the basis upon which marriage rules depend.

In western Arnhem Land we find the moiety-phratry arrangement (related to the totem) now influenced from the south by the subsection system, which is widely spread throughout Aboriginal Australia. Another feature here is the *namanamaidj*, which establishes a child's affinity with his father's group. This, together with tribal and linguistic membership, is patrilineal; but the descent of the moiety, phratry (and totem), and subsection, is matrilineal.

In eastern Arnhem Land the subsections have not yet been fully co-ordinated with the kinship structure, and many of the older people do not use them. Normally, however, the subsections are based on a system of marriage and descent, and are essentially a matter of kinship organisation. They group various relatives together under one term, in such a way that for general purposes all kinship terms are reduced to eight; and since there are eight divisions in this subsection system, four belong to one moiety, and four to the other.[1]

The eastern Arnhem Landers possess certain fundamental features in common with most other Australian Aboriginal communities. Away from European settlements, for instance, they are hunters and collectors who must forage for their food. On the northern and eastern coast of Arnhem Land food is certainly abundant and varied, but its constant supply depends on the

8: Berndt E-5 (1946-1950) 1954
OI17 Murngin OI17

rhythm of the seasons and (so these people believe) on the mythical characters of the "Eternal Dreaming" period. To ensure an adequate and constant supply of animal and vegetable food the eastern Arnhem Landers rely on their great ceremonial cycles – the *djunggawon*, *kunapipi*, *ngurlmag*, and the *dua* and *jiritja* moiety *nara*. These rituals are connected with the most important Ancestral Beings (like Djanggawul, Wauwalak, Laindjung, Banaidja and Baijini) and serve as the basis of the indigenous religion.

In the west the pattern is much the same. The Ancestral or Spirit Beings have different names, but their function is similar to that of their eastern variants. There is, for instance, a Fertility Mother named Amungundji, or Waramurunggoindju. With her husband, Wuraggag, she is the guardian of and the essence behind all the sacred ritual, such as the *maraiin*, and the age-grading *ubar* ceremonies. The ceremonies have also a mass of separate mythology, associated with Jurawadpad, the Snake man, but they are indirectly associated with the Fertility Mother.

All this ritual, however, is not concerned merely with the provision of food. Its purpose is primarily to ensure the continuation of the human species, and the increase of all other animals, birds, fish, vegetables and so on is a secondary matter. It is concerned with the fructification of all living things, of which human beings (in their own estimation, at least) are the most important.

We cannot discuss here even briefly the doctrines and ritual expressions of the various religious cults of western and eastern Arnhem Land: for although a fundamental thesis is common to them all, there are many local manifestations. That is to say, there are a number of different religious cults, each having its special mythology associated with Creative Beings; and their ceremonies, although often similar, differ in many respects. Some are concerned principally with the initiation of youths into the adult ceremonial sphere, and their gradual acceptance into the realm of the sacred. As a young man grows older, and passes through successive stages in his initiation, the religious life of his elders is slowly revealed to him. These particular series are termed age-grading rituals. But there are other ceremonies in which only fully initiated men may participate, and whose significance is

which is very far removed from the general picture of the Australian aborigine. 813 824

As the coast is approached, the country often becomes flat, and takes the form of wide plains through which the rivers flow sluggishly. On their estuarine reaches the rivers break up into innumerable arms, creeks and backwaters which are fringed with dense walls of mangroves. These brackish tidal reaches intersect the coastal plains, which are periodically flooded, becoming shallow lagoons which soon dry up, and leave miles of bare mud. This dries out and cracks so that it presents a tessellated appearance, and is often encrusted with deposits of salt. The estuarine reaches, tidal arms, and flood plains, yield very large quantities of food—chief of which are fish, for the capture of which many very specialised methods have been developed in Arnhem Land. Shellfish (*maipal*), including *laitjin*, (the wood-boring shipworm, *Teredo*) are also obtained in quantity in the mangrove zone. The shellfish are gathered at low water and *Teredo* are extracted from sodden logs uncovered at low tide, by splitting these with an axe and pulling them out by hand. 133 136 226

There are two well-defined seasons in Arnhem Land, the wet, or north-west monsoon, and the dry or south-east season. The "wet" extends from about December to March or April, when the wind is generally in the north-west quarter. During this period most of the annual rainfall—about 40 inches—occurs. The "dry" season extends from about April to November. At this season little rain falls except in far North-eastern Arnhem Land and for much of this period the wind blows steadily from the south-east. 132

This division of the year into two strongly-contrasted seasons has an important influence not only on the food supply of the people but also on their movements and occu- 221 805 813

221 805 813 pations, and therefore, on the nature of their camps and house types. It may be noted in passing that the seasonal influence on their lives and occupations is well appreciated by the natives themselves, and that they divide the annual cycle into six or more phases or seasons which they name from the winds, the weather conditions, or from the food supplies which characterise them. And again, they will name these phases, and state without hesitation the appropriate occupational sites at each of them, and their activities and food supplies which depend upon these seasonal conditions, with an insight and a precision that no white man who is not a trained ecologist and well versed in botany and zoology, could approach.

[133] 221 [137] 342 361 During the wet season the river courses rise quickly and soon overflow their banks so that the country is flooded for miles. The grass, especially on the plains, grows rank and high—often more than six feet—and the people are concentrated in semi-permanent wet season camps in which the population may exceed one hundred. Here they lead an almost sedentary existence in contrast with their active nomadic life in the south-east season. At this time they construct houses, sometimes of large size—thatched with bark of tea-tree (*Melaleuca*) or of stringybark (*Eucalyptus tetrodonta*). Some of these houses are well built and are provided with sleeping platforms under which fires can be lighted as a protection against mosquitoes. They are also equipped with racks to carry food and utensils. Each house type has its own traditional form, type of construction and distinctive name, and is often developed in adaptation to a particular environment, or is determined by the building materials available in the vicinity. Nine or ten types of houses or shelters are recognised in Arnhem Land. These vary from simple breakwinds built on the windward side in the "dry"

[352] [372]

or south-east season, and "shades" of boughs in the very hot dry weather, to the crescentic and semi-circular houses thatched with teatree bark, and the more elaborate rectangular huts of stringybark which are used in the wet season, and are of a more or less permanent nature. The large rectangular houses were, however, probably developed or modified as a result of Malay or Macassar influence. 221 342 361 [177]

When the flood waters subside after the storms and rains of the north-west season, the large wet season camps break up into small groups consisting of a few families, which disperse to lead a nomadic life within the confines of their own clan territories. Each phase, each season, has its own related food supply, and this is the chief factor which determines the daily activities of the people and also the area in which they are to be found at any time of the year. As the season advances and the grass dries, they practise systematic burning of the country in conjunction with their hunting activities. This is not a random business; it is well organised, and is carried out by the men as a communal enterprise, although in a restricted and controlled manner, with "drives" for kangaroos, wallabies or other game. 221 361 221 224

The actual burning of the grass is directed by the old men of the clan, or by others who have an hereditary right, especially by men of other clans who stand, under the kinship system, in the relationship of *wäkku* (son, woman speaking; sister's son, man speaking) that is, men to whom the clan is *yindipulo* (see pp. 11, 12). Such men are necessarily members of the opposite moiety, and to those unfamiliar with the people, they may appear to usurp the authority, to dominate the affairs, of clans to which they do not belong. But it is part of the traditional behaviour in this area, that certain people of *dua* moiety carry out some of the ritual tasks for members of certain clans of *yiritja* moiety to which 224 887 614 602 [616] 602 614 616

9: Thomson E-5 (1935-1943)1949
OI17 Murngin OI17

carried out locally and under close control, so that the "grass burn" season conducted by each horde, or hunting group, is prolonged sufficiently to yield its full food potential over a period of weeks or months, without waste.

By the time the burning of the grass has been completed, another phase in the cycle is reached. The group may now follow the watercourses, which are gradually drying up, and employ the special fishing methods which tradition (backed by a long period of trial and error) has established, as being appropriate to the area and to the season. They secure fish, freshwater tortoises and snakes, by swimming "drives" and by the use of dams, weirs, traps, nets, and special poisons containing chiefly *rotenone, saponin* and *tephrosin*, which, as the volume of water becomes restricted, can now be used effectively to stupefy the fish. One of the most effective of the fish poisons used by these people is *moiyoŋo* (*Tephrosia leptoclada*)* a leguminous plant with a root shaped like a small parsnip. This plant, of which specimens were examined at Rothamstead Experimental Station (Herts. England) was found to be highly toxic in solutions of 1%. Later again, the groups which have been hunting independently during the early south-east season, will converge on the few deep permanent lagoons, where the camps increase in size as they are augmented by other groups of people who have been similarly engaged in nomadic hunting.

At this time the chief food of the natives inland will be *ŋätu*, the fruit of the Cycad Palm (*Cycas media*), which in this area yields very large quantities of food. In coastal

*A second species of *Tephrosia* hitherto undescribed, also called *moiyoŋo*, collected during the expeditions in Arnhem Land on which this work was carried out, has since been named *T. Arnhemia* by Mr. C. T. White (Government Botanist, Queensland).

9: Thomson E-5 (1935-1943)1949
OI17 Murngin OI17

down the back when empty, but when full the weight is usually borne on the forehead, or if the load is a heavy one, the baskets are carried on top of the head. 482

At first glance, Arnhem Land, like many other parts of Northern Australia, may appear to be barren and inhospitable and to offer little promise for the gathering of vegetable foods. But it must be remembered that over the centuries the aborigines have accumulated great experience of the food plants of their environment, which is handed on from generation to generation, and that they have developed highly specialised methods for exploiting every resource of the territory in which they live. The food resources of Arnhem Land are rich and varied and the natives have developed effective processes for the preparation of its vegetable foods, as well as many clever and ingenious devices for the capture of fish and game. 262 827 221

Again the cooking and preparation of food is far from the crude or haphazard business of popular imagination. *nätu* is not the only poisonous plant which is used as food. A number of other food plants also contain soluble poisons which are eliminated by simple and effective, but often prolonged, cooking and washing. 252

The women are dexterous and neat in all their technological processes, and to watch them at work in the preparation of vegetable food is an object lesson in the skilful and efficient use of the simplest equipment. [462]

The task of the men is to provide animal food, both fish and game. As a rule, when a large quarry such as a kangaroo is killed, it is cooked and quartered on the spot, and is then divided equally among those taking part in the hunt. It is taken back to camp in a cooked or half-cooked state, often wrapped neatly in paperbark. Each man again divides his share of the game according to his obligations defined by [462] 224 262 602

ceremonial exchange system. Besides weapons and fishing lines, the heavier types of rope as well as most of the larger fishing nets, are made by men. In the coastal groups where bark canoes are used, the making of these craft is also the work of the men. In the case of dugout canoes, a man either makes his own canoe, a long and laborious task taking weeks or months of time and requiring a good deal of intensive hard work, or he employs a craftsman to make it for him, in which case he assumes the responsibility for the organisation of the work and for the payments involved. The large, coarsely woven fish traps, which may be five or six feet, or even more, in length, as well as other paraphernalia associated with fishing, are usually made by the men, although women may also assist.

How subtle may be the driving force which induces the natives to work, is shown by the following example. During the south-east or dry season the people rarely build houses, but are content with breakwinds, until the north-west or wet season. Even then they generally delay the work of gathering bark and other necessary building materials until the actual onset of the rains. During a patrol at the beginning of the north-west when we were debating as to whether a heavy storm that threatened was really about to break, one of the natives said "*ŋärru tobitj*",[18] "my muscles have twitched", (and therefore it will not rain). And such is the belief of the natives in these portents that the people would not go out and collect the necessary paperbark to make a proper camp, despite the threatening sky.

[18] Muscular twitching, called *tobitj*, is an omen or portent which is believed to give warning of a forthcoming event, or to foretell the approach of an enemy or a visitor. The part of the body in which the twitching occurs indicates the relationship in which the visitor stands to the person who receives the warning.

222 484 Even when they are making for a definite camping ground, aborigines very rarely travel in a straight line. Instead, the journey is made slowly, with deviations to favoured localities which are likely to yield food or game, so that they can hunt as they go. The women and children search for vegetable food as they travel, pausing at intervals to dig yams or other roots, which are put in a "dilly bag" or basket (*bäti*) carried for the purpose. Meanwhile the men are on the lookout for sugar bag (wild honey), opossums, bandicoots (*Isoodon*), native cats (*Dasyurus*), as well as snakes and goannas (*Varanus*) or any other game which they can find. On these journeys nothing comes amiss, and in addition to the quest for food, both men and women pause to gather any materials of use in technological [314] processes, which they may see. The young branches of such [283] trees as *bulgut*, (*Brachychiton paradoxum*), which form an important source of the fibre used for making string, are cut, the bast fibre stripped and tied neatly or rolled up, to be put into their dilly bags for later use. When a "sugar bag" or wild bees' nest is found the honey and even the bee bread is eaten on the spot, unless there is a large [415] amount, when it is carried in a bark trough or a closely [237] woven basket of special type called *timbuka*. The soft black wax is roughly moulded into a ball and carried in this form, to be cleaned and refined later, and used for the mounting of certain spear heads, particularly for *ŋämbi* and *kaiyit* (flint and iron respectively).

[221] 222 512 When the vegetable harvest is at its height, about the middle of the south-east season, and the people are living chiefly on a single staple food which can be harvested readily in one place, the women generally go out in a body. [476] But at such times, although they work close together, there IS NO POOLING OF RESOURCES; EACH COLLECTS 30 FOOD INDEPENDENTLY, WORKING FOR HER OWN FAMILY OR FAMILY GROUP.